

This listing of claims replaces all previous versions of the claims in this application.

**Listing of Claims:**

Claims 1-36 (cancelled)

37. (currently amended) A method of inhibiting the pathological proliferation of ovarian cancer cells in a patient that has a population of ovarian cancer cells that has been determined to comprise ~~comprising~~ cancer cells in which 3q26.3 is amplified, the method comprising administering a therapeutically effective dose of an inhibitor of PI3 kinase to the patient, wherein the inhibitor inhibits PI3 kinase enzymatic activity.

38. (previously presented) The method of claim 37, wherein the inhibitor of PI3 kinase is a non-peptidic inhibitor of PI3 kinase phosphoinositide phosphorylation activity.

39. (previously presented) The method of claim 38, wherein the non-peptidic inhibitor is LY294002.